

RECEIVED
CENTRAL FAX CENTER

APR 12 2007

10/549,869

REMARKS

Claims 13-19 are rejected, under 35 U.S.C. § 103(a), as being unpatentable over EP '150 in view of DE '855. The Applicant acknowledges and respectfully traverses the raised obviousness rejection in view of the above amendments and the following remarks.

Before discussing the present invention as recited in the claims and the cited prior art, it must be noted that in response to the rejections of the claims of the cited prior art, under 35 U.S.C. 103, the claims are amended to more explicitly recite the present invention and the distinctions of the present invention over the applied prior art. In particular, claim 13 is amended and new claims 20 and 21 are entered with alternate wording concerning the presently claimed invention. It will be noted that these amendments are fully supported by the specification and the drawings, as originally filed, and thus do not add any new subject matter to this application.

Turning now to the present invention as recited in claims 13, 20 and 21, the present invention is directed to control valve (12) for providing a pressurized medium at a selectable one of a first pressure and a second pressure wherein the valve includes a valve housing (13) and a switching valve (20, 32). As recited in the claims, the valve housing (13) includes an inner chamber (14), first and second medium inflow openings (6, 7) for inflow of the medium at respectively the first and the second pressure and a medium outflow opening (8) for an outflow of the medium at the selected one of the first and the second pressures.

The switching valve (20, 32), in turn, is located in the inner chamber (14), is actuated solely by a medium inflow of a selected one of the first and second medium inflow openings (6, 7) and has first and second switching positions for selectably opening one and closing the other of the first and the second medium inflow openings (6, 7) so that the medium at the outflow opening (8) is at the pressure of the selected one of the first and the second medium inflow openings (6, 7).

Further, according to claims 13, 20 and 21, the switching valve (20, 32) includes first and second sealing means (17, 18, 24, 25) that are interconnected and radially disposed about a pivot axis (30, 21, 22) to jointly rotate along respective first and second arc sections respectively intersecting with the first and the second medium inflow openings (6, 7). The first and second sealing means (17, 18, 20, 24) are acted upon solely by one of the first and second medium pressures from one of the first and the second medium inflow openings to jointly rotate so that the first and the second sealing means (17, 18, 24, 25) selectably open one and close the other of the first and the second medium inflow openings (6, 7), so that the outflow of the medium at the outflow opening (8) is thereby at the corresponding one of the first and the second medium pressures.

Now considering the teachings of EP '150, this reference relates to a valve for a fluid medium that has an internal switching valve that includes two valve bodies mounted onto the ends of a see-saw-like tipping arm to alternately open or close one or the other of two input ports as the arm is tipped one way or the other to thereby allow medium to flow from one input

4/12/07 11:25 AM

- 6 -

10/549,869

port or the other to an output port. As clearly shown and described in EP '150, the operation of the valve mechanism, that is, the tipping of the arm and thus the selection of which input port is opened and which input port is closed, is controlled solely by a solenoid mechanism having two solenoid actuation rod wherein one actuation rod is attached to each end of the tipping arm. The movement of the two rods, and thus the tipping of the arm to open and close the two input ports, is controlled solely by the mechanical mechanism comprising the solenoid rods and the arm and is not, and cannot be, actuated or controlled by the pressure of the heating medium entering through the two input ports. In fact, the design of the EP '150 valve appears to be such as to prevent the pressure and flow of the medium through the valve from effecting or controlling the operation of the valve in any way.

The presently claimed invention is therefore completely and fundamentally distinguished over and from the EP '150 valve mechanism by being controlled by an entirely different type of mechanism than is used in the EP '150 valve mechanism. More specifically, the valve of the presently claimed invention is actuated and controlled solely by the pressure of the fluid medium at the inflow openings while the EP '150 valve is actuated and controlled solely by an electro-mechanical solenoid means, that is, is controlled solely by a mechanical means, and is completely unaffected by the pressure or flow of the medium in or through the valve.

As will be noted from amended claim 13 and new claims 20 and 21, those claims explicitly recite this distinction over the EP '150 mechanism, as do claims 14-19 by virtue of dependency from claim 13. It is therefore the Applicant's position that EP '150 does not in any way teach, suggest and/or disclose the mechanism of the present invention, as recited in pending claims 13-21, to those of ordinary skill in the arts under the requirements and provisions of either 35 U.S.C. 102 or 35 U.S.C. 103.

Now turning to the teachings of DE '855, this reference relates to a pressure regulating valve for a heating system that is basically very similar to that taught by EP '150 in having an internal switching valve that includes two valve bodies mounted onto the ends of a see-saw-like arm to alternately open or close one or the other of two input ports as the arm is tipped one way or the other to thereby allow heating fluid to flow from one input port or the other to an output port. As clearly shown and described in DE '855, the operation of the valve mechanism, that is, the tipping of the arm and thus the selection of which input port is opened and which input port is closed, is controlled solely by a solenoid rod that is attached to an extension to one end of the arm that tips to control the opening and closing of the two input ports. The opening and closing of the two input ports is thereby controlled solely by the mechanical mechanism comprising the solenoid rod and the arm and is not, and cannot be, actuated or controlled by the pressure of the heating medium entering through the two input ports. In fact, the design of the DE '855 valve appears to be so as to prevent the pressure and flow of the medium through the valve from effecting or controlling the operation of the valve in any way.

The present invention is therefore completely and fundamentally distinguished over and from the DE '855 valve mechanism by being controlled by an entirely different type of

4/12/07 4:01:00 A.M.

- 7 -

10/549,869

mechanism than is used in the DE '855 valve mechanism. More specifically, the valve of the present invention, as recited in pending claims 13-21, is actuated and controlled solely by the pressure of the fluid medium at the inflow openings while the DE '855 valve is actuated and controlled solely by a mechanical leverage means and is completely unaffected by the pressure or flow of the medium in or through the valve. As will be noted from amended claim 13 and new claims 20 and 21, all of those claims explicitly recite this distinction over the DE '855 mechanism, as do claims 14-19 by virtue of dependency from claim 13. It is therefore the Applicant's position that DE '855 fails to in any way teach, suggest and/or disclose the mechanism of the presently claimed invention to those of ordinary skill in the arts under the requirements and provisions 35 U.S.C. 103.

Now considering the combination of EP '150 with DE '855, it is obvious that both EP '150 and DE '855 are valve mechanisms employing a tipping arm for controlling the positions of two valve elements wherein the tipping of the arm and thus the opening and closing of the two valve ports is controlled solely by an electro-mechanical solenoid, that is, solely by a purely mechanical means. It is therefore apparent that any combination of EP '150 and DE '855 can and will result only in a valve mechanism employing a tipping arm to control the positions of two valve elements wherein the tipping of the arm and thus the opening and closing of the two valve ports is controlled solely by an electro-mechanical solenoid, that is, solely by a purely mechanical means.

It is therefore apparent that the presently claimed invention is completely and fundamentally distinguished over and from all possible proper combinations of EP '150 and DE '855 by being controlled by an entirely different type of mechanism than is used in the EP '150 and DE '855 valve mechanisms. More specifically, the valve of the present invention, as recited in pending claims 13-21, is actuated and controlled solely by the pressure of the fluid medium at the inflow openings while the EP '150 and DE '855 valves are actuated and controlled solely by a mechanical leverage means and are completely unaffected by the pressure or flow of the medium in or through the valve. Amended claim 13 and new claims 20 and 21 all explicitly recite this distinction over the EP '150 in view of DE '855, as do claims 14-19 by virtue of dependency from claim 13. It is therefore the Applicant's position that EP '150 in view of DE '855 fails to teach, suggest or disclose the mechanism of the present invention, as recited in pending claims 13-21, to those of ordinary skill in the arts under the requirements and provisions of 35 U.S.C. 103. The Applicant therefore respectfully requests that the Examiner reconsider and withdraw all rejections of the claims 13-19 and new claims 20 and 21, over the applied prior art, and allow claims 13-21 as presented herein.

If any further amendment to this application is believed necessary to advance prosecution and place this case in allowable form, the Examiner is courteously solicited to contact the undersigned representative of the Applicant to discuss the same.

In view of the above amendments and remarks, it is respectfully submitted that all of the raised rejection(s) should be withdrawn at this time. If the Examiner disagrees with the

4/15/07-11:06 AM

RECEIVED
CENTRAL FAX CENTER

APR 12 2007

10/549,869

Applicant's view concerning the withdrawal of the outstanding rejection(s) or applicability of the EP '150 and/or DE '855 references, the Applicant respectfully requests the Examiner to indicate the specific passage or passages, or the drawing or drawings, which contain the necessary teaching, suggestion and/or disclosure required by case law. As such teaching, suggestion and/or disclosure is not present in the applied references, the raised rejection should be withdrawn at this time. Alternatively, if the Examiner is relying on his/her expertise in this field, the Applicant respectfully requests the Examiner to enter an affidavit substantiating the Examiner's position so that suitable contradictory evidence can be entered in this case by the Applicant.

In view of the foregoing, it is respectfully submitted that the raised rejection(s) should be withdrawn and this application is now placed in a condition for allowance. Action to that end, in the form of an early Notice of Allowance, is courteously solicited by the Applicant at this time.

The Applicant respectfully requests that any outstanding objection(s) or requirement(s), as to the form of this application, be held in abeyance until allowable subject matter is indicated for this case.

In the event that there are any fee deficiencies or additional fees are payable, please charge the same or credit any overpayment to our Deposit Account (Account No. 04-0213).

Respectfully submitted,



Michael J. Bujold, Reg. No. 32,018
Customer No. 020210
Davis Bujold & Daniels, P.L.L.C.
112 Pleasant Street
Concord, NH 03301-2931
Telephone 603-226-7490
Facsimile 603-226-7499
E-mail: patent@davisandbujold.com